

# National Highway Traffic Safety Administration [Docket No. NHTSA 2013-0047]

# NHTSA Activities under the United Nations World Forum for the Harmonization of Vehicle Regulations 1998 Global Agreement

**AGENCY**: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

**ACTION**: Notice of activities under the 1998 Global Agreement and request for comments.

**SUMMARY**: NHTSA is publishing this notice to inform the public of the upcoming scheduled meetings of the World Forum for the Harmonization of Vehicle Regulations (WP.29) and its Working Parties of Experts for calendar year 2013. It also provides the most recent status of activities under the Program of Work of the 1998 Global Agreement (to which the United States is a signatory Contracting Party) and requests comments on those activities. Publication of this information is in accordance with NHTSA's Statement of Policy regarding Agency Policy Goals and Public Participation in the Implementation of the 1998 Global Agreement on Global Technical Regulations (GTR).

**DATES:** Written comments may be submitted to this agency within 30 days of publication of this notice.

**ADDRESSES:** You may submit comments identified by DOT Docket No.

NHTSA-2013-0010 by any of the following methods:

Federal eRulemaking Portal: Go to <a href="http://www.regulations.gov">http://www.regulations.gov</a>. Follow the online instructions for submitting comments.

- Mail: Docket Management Facility: U.S. Department of Transportation,
   1200 New Jersey Avenue S.E., West Building Ground Floor, Room W12-140,
   Washington, D.C. 20590-0001
- Hand Delivery or Courier: West Building Ground Floor, Room W12-140,
   1200 New Jersey Avenue S.E., between 9 a.m. and 5 p.m. ET, Monday through
   Friday, except Federal holidays. Telephone: 1-800-647-5527.
- Fax: 202-493-2251

*Instructions:* All submissions must include the agency name and docket number for this proposed collection of information. Note that all comments received will be posted without change to <a href="http://www.regulations.gov">http://www.regulations.gov</a>, including any personal information provided. Please see the Privacy Act heading below.

*Privacy Act:* Anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the *Federal Register* published on April 11, 2000 (65 FR 19477-78), or you may visit http://DocketInfo.dot.gov.

*Docket:* For access to the docket to read background documents or comments received, go to http://www.regulations.gov or the street address listed above. Follow the online instructions for accessing the dockets.

**FOR FURTHER INFORMATION CONTACT:** Mr. Ezana Wondimneh, Chief, International Policy and Harmonization Division (NVS-133), National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington, D.C., 20590; Telephone: (202) 366-0846, fax (202) 493-2280.

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## I. Background

On August 23, 2000, NHTSA published in the Federal Register (65 FR 51236) a statement of policy regarding the Agency's policy goals and public participation in the implementation of the 1998 Global Agreement, indicating that each calendar year the Agency would provide a list of scheduled meetings of the World Forum for the Harmonization of Vehicle Regulations (WP.29) and the Working Parties of Experts, as well as meetings of the Executive Committee of the 1998 Global Agreement (AC.3). Further, the Agency stated that it would keep the public informed about the Agreement's Program of Work (i.e., subjects designated for Global Technical Regulation (GTR) development) and seek comment on those subjects on a regular basis. In keeping with the policy, NHTSA has notified the public about the status of activities under the 1998 Global Agreement and sought comments on various issues and proposals through a series of Federal Register notices published beginning July 2000.<sup>2</sup>

This notice provides the latest and current status of the Agency's activities at the World Forum for the Harmonization of Vehicle Regulations under the 1998 Global Agreement.

# A. WP.29 and its Working Parties of Experts

# 1. WP.29

WP.29 was established on June 6, 1952 as the Working Party on the Construction of Vehicles, a subsidiary body of the Inland Transport Committee (ITC) of the United Nations

<sup>&</sup>lt;sup>1</sup> This statement of policy is codified in Appendix C of Part 553 of Title 49 of the CFR.

<sup>&</sup>lt;sup>2</sup> The relevant Federal Register notices include: 65 FR 44565, 66 FR 4893, 68 FR 5333, 69 FR 60460, 71 FR 59582, 73 FR 7803, 73 FR 8743, 73 FR 31914, 73 FR 5520, and 77FR 4618.

Economic Commission for Europe (UNECE). In March 2000, WP.29 became the "World Forum for Harmonization of Vehicle Regulations (WP.29)." The objective of the WP.29 is to initiate and pursue actions aimed at the worldwide harmonization or development of technical regulations for vehicles.<sup>3</sup> Providing uniform conditions for periodical technical inspections and strengthening economic relations worldwide, these regulations are aimed at:

- improving vehicle safety;
- protecting the environment;
- promoting energy efficiency; and
- increasing anti-theft performance.

WP.29 currently administers three UNECE Agreements:

- UNECE 1958 Agreement concerning the Adoption of Uniform Technical
   Prescriptions for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on
   Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the
   Basis of these Prescriptions;
- 2. UNECE 1998 Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles;
- 3. UNECE 1997 Agreement concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of such Inspections.

Four committees coordinate the activities of WP.29:

<sup>&</sup>lt;sup>3</sup> For general information about WP.29, see the document, "World Forum for Harmonization of Vehicle Regulations (WP.29) – How It Works, How to Join It," available at http://www.unece.org/transport/resources/publications/publications.html.

AC.1 - Administrative Committee for 1958 Agreement

AC.2 - Administrative Committee for the Coordination of Work

AC.3 - Executive Committee for 1998 Agreement

AC.4 - Administrative Committee for 1997 Agreement

AC.1, AC.3 and AC.4 are the Administrative/Executive Committees for the Agreements administered by WP.29, constituting all Contracting Parties of the respective Agreements.

The coordination of work of the World Forum is managed by a Steering Committee (AC.2) comprising the Chairperson and Secretariat of WP.29, the Chairpersons of the Executive Committees of the 1958, 1997 and 1998 Agreements administered by WP.29, the representatives of the European Community, Japan and the United States of America, and the Chairpersons of WP.29's subsidiary bodies (GRs or Working Parties). The duties of AC.2 are to develop and recommend to WP.29 a Program of Work, to review the reports and recommendations of WP.29's subsidiary bodies, to identify items that require action by WP.29 and the time frame for their consideration, and to provide recommendations to WP.29.

# 2. Working Parties of Experts

The permanent subsidiary bodies of WP.29, also known as GRs (Groups of Rapporteurs), assist the World Forum for Harmonization of Vehicle Regulations in researching, analyzing and developing requirements for technical regulations in the areas of their expertise. There are six subsidiary bodies:

Working Party on Lighting and Light-Signaling (GRE)

Working Party on Brakes and Running Gear (GRRF)

Working Party on Passive Safety (GRSP)

Working Party on General Safety Provisions (GRSG)

Working Party on Pollution and Energy (GRPE)

Working Party on Noise (GRB)

Each subsidiary body consists of persons whose expertise is relevant to the area covered by the body. All proposals for new regulations or amendments to existing regulations are referred by the World Forum to its relevant subsidiary bodies for the development of technical recommendations. In view of the significance of the role of these subsidiary bodies, they have been given permanent status under the UN and have been designated as permanent and formal "Working Parties." More specifically, the working parties and their areas of expertise are outlined below:

## Active Safety of Vehicles and their Parts (Crash Avoidance)

Working Party on Lighting and Light-Signaling (GRE)

Working Party on Brakes and Running Gear (GRRF)

The regulations in this area seek to improve the behavior, handling and equipment of vehicles so as to decrease the likelihood of a road crash. Some of the regulations seek to increase the ability of drivers to detect and avoid hazardous circumstances. Others seek to increase the ability of drivers to maintain control of their vehicles. Specific examples include ones applying to lighting and light-signaling devices, braking, steering, tires and rollover stability. This area of safety technology is rapidly changing. The advent of advanced technologies (e.g., electronic control systems, advanced sensors and communication) is providing opportunities for developing new approaches for helping drivers avoid crashes.

# Passive Safety (Crashworthiness)

Working Party on Passive Safety (GRSP)

The regulations in this area seek to minimize the risk and severity of injury for the occupants of a vehicle and/or other road users in the event of a crash. Extensive use is made of crash statistics to identify safety problems for which a regulation or amendment to an existing regulation is needed and define a proper cost/benefit approach when improving performance requirements in this area. This is important, given the overall impact of new requirements on vehicle construction, design and cost. Specific examples of current regulations include ones addressing the ability of the vehicle structure to manage crash energy and resist intrusion into the passenger compartment, occupant restraint and protection systems for children and adults, seat structure, door latches and door retention, pedestrian protection, and for motorcycles, the quality of the protective helmet for the rider. This area of technology also is changing rapidly and becoming more complex. Examples include advanced protection devices that adjust their performance in response to the circumstances of individual crashes.

#### **General Safety Considerations**

Working Party on General Safety Provisions (GRSG)

The regulations in this area address vehicle and component features which are not directly linked to the above-mentioned subject areas. For example, windshield wipers and washers, controls and displays, and glazing are grouped under this heading. Further, theft prevention and the considerations related to motor-coaches and other mass public transport vehicles are covered under this category.

#### **Environmental Considerations**

Working Party on Pollution and Energy (GRPE)

Working Party on Noise (GRB)

In general, the regulations in this area address questions of the pollution of the environment, noise disturbances and conservation of energy (fuel consumption). However, the issue of quiet vehicles' unintended safety consequence related to pedestrian safety is currently being addressed by the Working Party on Noise (GRB) even though this group does not normally address safety issues. This is because the necessary acoustics experts needed to develop a safety regulation to address the issue are part of this group.

#### Special Technical Considerations

Informal Working Groups (IWGs)

In some cases, a specific problem needs to be solved urgently or needs to be addressed by persons having a special expertise. There are also cases where an issue cuts across multiple GRs or is not specifically relevant to any of them. In such situations, a special informal working group may be entrusted with the analysis of the problem and invited to prepare a proposal for a regulation. Although such cases have traditionally been kept to a minimum, the rapid development of complex new technologies is increasing the necessity for using this approach.

#### II. List of Provisional Meetings of WP.29 and its Working Parties of Experts

The following list shows the scheduled meetings of WP.29 and its subsidiary Working Parties of Experts for calendar year 2013. In addition to these meetings, Working Parties of Experts may schedule, if necessary, IWG sessions outside their regular schedule in order to address technical matters specific to GTRs under consideration. The formation and timing of these groups are recommended by the sponsoring Contracting Party and are approved by WP.29 and AC.3. The schedules and places of meetings are made available to interested parties in proposals and periodic reports which are posted on the website of WP.29, which can be found at: http://www.unece.org/trans/main/welcwp29.html.

# 2013 Provisional Schedule of Meetings of WP.29 and its Working Parties of Experts

<b>JANUARY</b>			
15-18	Working Party on Pollution and Energy (GRPE) (65th session)		
<b>FEBRUARY</b>			
5-7	Working Party on Noise (GRB) (57th session)		
19-22	Working Party on Brakes and Running Gear (GRRF) (74th session)		
<b>MARCH</b>			
11	Administrative Committee for the Coordination of Work (WP.29/AC.2) (111th session)		
12-15	World Forum for Harmonization of Vehicle Regulations (WP.29) (159th session)		
<b>APRIL</b>			
8-11	Working Party on Lighting and Light-Signalling (GRE) (69th session)		
15-19	Working Party on General Safety Provisions (GRSG) (104th session)		
MAY			
13-17	Working Party on Passive Safety (GRSP) (53rd session)		
<b>JUNE</b>			
4-7	Working Party on Pollution and Energy (GRPE) (66th session)		
24	Administrative Committee for the Coordination of Work (WP.29/AC.2) (112th session)		
25-28	World Forum for Harmonization of Vehicle Regulations (WP.29)		
	(160th session)		
<b>SEPTEMBER</b>			
2-4	Working Party on Noise (GRB) (58th session)		
17-19	Working Party on Brakes and Running Gear (GRRF) (75th session)		
<b>OCTOBER</b>			
8-11	Working Party on General Safety Provisions (GRSG) (105th session)		
21-23	Working Party on Lighting and Light-Signalling (GRE) (70th session)		
<b>NOVEMBER</b>			
11	Administrative Committee for the Coordination of Work (WP.29/AC.2) (113th session)		
12-15	World Forum for Harmonization of Vehicle Regulations (WP.29)		
	(161st session)		
14	Working Party on Pollution and Energy (GRPE) (67th session)		
DECEMBER			

17-20 Working Party on Passive Safety (GRSP) (54th session)

# III. Status of Activities Under the Program of Work of the 1998 Global Agreement

The current Program of Work of the 1998 Global Agreement is listed in the table below.

Note that the items listed are for those related to vehicle safety only.

Working Party of Experts	Subject	Sponsoring Contracting Party	Chair of Informal Working Group
WP.29	Exchange of Information - Enforcement Working Group	USA	USA
GRRF	GTR on Tires for Light Vehicles	France	UK
GRSP	Phase 2 of GTR No. 7 (Head Restraints)	Japan	UK
	Phase 2 of GTR No. 9 (Pedestrian Safety)	Japan/Germany	Germany/Japan
	GTR on Hydrogen Vehicles – Safety Sub-Group	USA/Germany/Japan	USA/Japan
	GTR on Pole Side Impact	Australia	Australia
	Exchange of Information on Harmonized Side Impact Dummies	USA	USA
	Electric Vehicles Safety GTR	USA/Japan/European Commission (EC)/China	USA/Japan
GRB	GTR on Quiet Road Transport Vehicles	USA/Japan/EC	USA/Japan

# A. Status of GTRs Under Development

## 1. Pedestrian Safety

At the November 2008 session, WP.29 voted to establish<sup>4</sup> GTR 9<sup>5</sup> on Pedestrian Safety. Implementation of the GTR by the contracting parties would improve pedestrian safety by requiring vehicle hoods and bumpers to absorb energy more efficiently in a 40 kilometer per hour (km/h) vehicle-to-pedestrian crash. Crashes at speeds up to that threshold account for more than 75 percent of crashes in which

<sup>&</sup>lt;sup>4</sup> Under the 1998 Global Agreement, GTRs are established by consensus vote of the Agreement's contracting parties present and voting.
<sup>5</sup> While the 1998 Global Agreement, GTRs are established by consensus vote of the Agreement's contracting

While the 1998 Global Agreement obligates contracting parties that vote in favor of establishing a GTR to begin their domestic rulemaking process, it leaves the ultimate decision of whether they adopt the GTR to the parties themselves.

pedestrians are injured.

The GTR contains two sets of performance criteria applying to: (a) the hood; and (b) the front bumper. Unique test procedures address adult and child head and adult leg impact protection for each of the two crash scenarios. At the time GTR 9 was adopted, a legform impactor developed by TRL (Transport Research Laboratory, UK) was used to evaluate front bumper impact performance. WP.29, however, agreed to consider the future use of a newer legform impactor called Flex-PLI (Flexible Pedestrian Legform Impactor), which may be more biofidelic. At the May 2011 session of GRSP, NHTSA reported research results that raised concerns about the readiness of the Flex-PLI device. As a result, at its June 2011 session, WP.29 agreed to form a new IWG under the sponsorship and chairmanship of Germany and Japan to further refine the Flex-PLI device.

The IWG has updated its terms of references (TOR) and operating principles for the IWG and a first draft UN GTR for information purposes only. The IWG is conducting a series of round robin testing on the Flex-PLI device to further validate its performance. The IWG is also working on the cost and benefit analysis.

Due to this GTR-9 phase II activity, NHTSA is reevaluating how it will proceed with rulemaking on the original GTR.

#### 2. Head Restraints

The GTR for head restraints (GTR 7) was established by WP.29 at its March 2008 session. At that time, the GTR incorporated a dynamic test option to some of the static requirements using the Hybrid III test dummy. It was anticipated that a new dummy, BioRID II, might eventually allow for a full system whiplash evaluation test that incorporates the combined performance of the seat and head restraint, but the dummy

was not then sufficiently developed to incorporate even as an option, the way the Hybrid III dummy was incorporated.

Therefore, in November 2009, WP.29 initiated a second phase of development for the GTR by forming a new IWG tasked with the development of a fully developed BioRID II test tool, including test procedures, injury criteria and associated corridors. At the last meeting of the IWG, December 10-11, 2012, the chairman confirmed that the development of a proposal for a certification procedure of the BioRID II was in progress and that the study, which is funded by the EC, identified areas of dummy performance, specifically, reproducibility, still required further investigation. He also reported that the group may have to consider proposing it as an option to Hybrid III rather than a replacement. The goal of the IWG is to submit a proposal for consideration at the December 2013 session of GRSP. If GRSP votes to recommend the amendments at that session, WP.29 could vote on the amendments as early as the May 2014 session.

#### 3. Quiet Electric and Hybrid-Electric Vehicles

In 2009, NHTSA published a report on the incident rates of crashes involving hybrid-electric vehicles and pedestrians under different scenarios.<sup>6</sup> The U.S. study, using crash data collected from several states, compared vehicle to pedestrian crash rates for hybrid electric-vehicles and vehicles with internal combustion engines (ICE). In the study, the agency concluded that there was an increased rate of pedestrian crashes for hybrid electric vehicles versus similarly sized ICE vehicles. In 2010, the

<sup>&</sup>lt;sup>6</sup> "Research on Quieter Cars and the Safety of Blind Pedestrians, A Report to Congress" prepared by National Highway Traffic Safety Administration, U.S. Department of Transportation, October 2009. This report can be found at

http://www.nhtsa.gov/DOT/NHTSA/NVS/Crash%20 Avoidance/Technical%20 Publications/2010/Rpt To Congress 091709.pdf

agency published a second report that found that the overall sound levels for the hybrid-electric vehicles tested were lower at low speeds than for the peer ICE vehicles tested.<sup>7</sup>

The Japanese Ministry of Land, Infrastructure, Transport and Tourism (MLIT), after studying the feasibility of alert sounds for electric and hybrid-electric vehicles, issued guidelines for pedestrian alert sounds in 2010. MLIT concluded that pedestrian alert sounds should be required only on hybrid-electric vehicles that can run exclusively on an electric motor, electric vehicles and fuel-cell vehicles. MLIT guidelines require that electric and hybrid-electric vehicles generate a pedestrian alert sound whenever the vehicle is moving forward at any speed less than 20 km/h and when the vehicle is operating in reverse. The guidelines do not require vehicles to produce an alert sound when the vehicle is operating, but stopped, such as at a traffic light. Also, manufacturers are allowed to equip the vehicle with a switch to deactivate the alert sound temporarily.

WP.29 also determined that vehicles propelled in whole or in part by electric means, present a danger to pedestrians and consequently adopted guidelines covering alert sounds for electric and hybrid vehicles that are closely based on the Japanese guidelines at its March 2011 meeting. The guidelines were published as an annex to the UNECE Consolidated Resolution on the Construction of Vehicles (R.E.3).

Considering the international interest and work in this new area of safety, the United States, the European Commission (EC) and Japan agreed to work, as cosponsors, on a new GTR to develop harmonized pedestrian minimum sound requirements for electric and hybrid-electric vehicles under the 1998 Global

<sup>&</sup>lt;sup>7</sup> Garay-Vega, Lisandra; Hastings, Aaron; Pollard, John K.; Zuschlag, Michael; and Stearns, Mary D., Quieter Cars and the Safety of Blind Pedestrians: Phase I, John A. Volpe National Transportation Systems Center, DOT HS 811 304 April 2010, available at

http://www.nhtsa.gov/DOT/NHTSA/NVS/Crash%20Avoidance/Technical%20Publications/2010/811304rev.pdf.

Agreement.<sup>8</sup> WP.29 is now working to develop a GTR that will consider international safety concerns and leverage expertise and research from around the world.

Meetings of the IWG are expected to take place regularly with periodic reporting to WP.29 until the expected establishment date for the new GTR in November 2014.

Two meetings of the IWG were held in 2012: (1) Washington DC, in July and (2) Berlin, Germany, in December. The meeting agendas, reports and related documents can be found on the UN website for this IWG.<sup>9</sup>

#### 4. Electric Vehicles

At the March 2012 session of WP.29, the co-sponsors (the United States, Japan, and the EC) submitted a joint proposal (ECE/Trans/WP.29/2012/36. and its Corr1) to establish two working groups to address the safety and environmental issues associated with electric vehicles (EVs). The WP.29 Executive Committee adopted this proposal as well as approved China, per its request, as the fourth co-sponsor.

The objective of the two working groups is to seek regulatory convergence on the global scale via the work in the framework of the 1998 Agreement. For the safety aspects, an electric vehicle safety (EVS) IWG was formed to begin development of the GTR, which would apply to all types of hybrid and pure electric vehicles, their batteries, and other associated high risk components. The United States chairs the IWG with China and the EU as co-vice chairs, and Japan as the secretary. To the extent possible, the GTR will include performance-based requirements and testing protocols designed to allow for innovation, while ensuring that the unique safety risks posed by electric

<sup>&</sup>lt;sup>8</sup> Additionally, the agency is taking this action because the Pedestrian Safety Enhancement Act requires the agency to issue a standard specifying minimum sound for Hybrid and Electric Vehicles. The agency announced its proposal on January 7, 2013.

<sup>9</sup> https://www2.unece.org/wiki/display/trans/GTR+for+QRTV

vehicles are mitigated. The GTR will address the safety of high voltage electrical components, including lithium-ion and other types of batteries, their performance during normal use, after a crash event, and while recharging at a residential or commercial station.

Two EVS IWG meetings were held in 2012: (1) Washington DC, in April and (2) Bonn, Germany, in October. At these meetings, the IWG established the Terms of Reference (TOR), exchanged current regulatory, technical and research information and drafted an outline for the GTR. At the second IWG meeting, the International Organization of Motor Vehicle Manufacturers (OICA) submitted a proposal for the IWG consideration, which included safety requirements for occupant protection against high voltage and rechargeable energy storage systems. It was presented in detail, generating substantial discussion, however, there were also a significant number of questions raised regarding the basis for the requirements and test protocols. As appropriate, the IWG will consider the OICA proposal as well as other existing international standards and regulations and results and recommendations from ongoing research activities as the basis for future discussions and drafting the GTR.

#### 5. Light Vehicle Tires

The IWG for developing a GTR on light vehicle tires began its work in September 2006. The activity is sponsored by France and chaired by the UK. The GTR would apply to radial passenger and light truck tires designed to be used on vehicles with a gross mass of 10,000 pounds or less. Its provisions include five mandatory performance and labeling requirements (tire sidewall markings, tire dimensions, high speed performance, low pressure and endurance performance, and wet grip performance).

In addition, there are two optional modules, with one containing a tire strength test

and bead unseating resistance test, and the second containing a tire rolling sound emission test. During the course of the development of the GTR, it became apparent that the requirements for light truck tires would require more time to develop. It was therefore decided by WP.29 to split the work on the GTR into two phases. The first phase covers passenger car tires only, and the second will address the light truck tires.

The IWG expects to continue its work in 2013 (and meet on the margins of upcoming sessions of the GRRF).

#### B. Status of GTRs Nearing Completion and Establishment by Vote

#### 1. Hydrogen Fuel-Cell Vehicles

In June 2007, WP.29 adopted an Action Plan prepared by the cosponsors (United States, Germany and Japan) to develop a GTR for compressed gaseous and liquefied hydrogen fuel vehicles. WP.29 formed an IWG to develop a GTR for these types of vehicles with the aim of attaining levels of safety equivalent to those for conventional gasoline-powered vehicles. The GTR will cover the safety of hydrogen fuel containers, hydrogen fuel lines and their related components, as well as the safety of high-voltage components.

The work of the IWG is nearing completion. The draft GTR was recommended by the experts of GRSP at the December 2012 session, and is expected to be submitted for a vote at June 2013 session of WP.29. The last outstanding items were addressed as follows:

1) Electrical Barrier for High Voltage: This requirement provides the protection from direct contact with high voltage components by the use of a physical barrier

<sup>&</sup>lt;sup>10</sup> The GTR Action Plan (ECE/TRANS/WP.29/2007/4I) and GTR proposal (ECE/TRANS/WP.29/AC.3/I 7) can be found at <a href="http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/gen2007.html">http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/gen2007.html</a> and <a href="http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29glob">http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29glob</a> proposal.html, respectively.

i.e., enclosure or insulation. This was proposed as a stand-alone option in addition to the two current options that are widely accepted and have been established in Federal Motor Vehicle Safety Standard (FMVSS) No. 305: absence of high voltage and electrical isolation. While this option provides sufficient protection for in-use application, there are still remaining questions regarding its effectiveness as a stand-alone option for certain post-crash scenarios. Consequently, the IWG decided to establish this as an optional safety requirement that contracting parties may or may not elect to adopt.

- 2) Duration of the Localized Fire Test: This requirement in the GTR specifies the duration of a localized fire test, which is a part of the fire protection requirement for fuel containers. The localized fire is followed by an engulfing fire, during which the hydrogen container must not rupture or explode. The IWG agreed to set the duration of the localized fire to nine (9) minutes based on test data from Japan and the United States.
- 3) Hydrogen Container Material Compatibility: The research for this critical item has not yet been completed and is expected to continue. Therefore, the IWG has agreed to recommend that the contracting parties continue to use their current regulations and standards, if any, until suitable harmonized provisions can be developed in the second phase of the GTR.
- 2. Pole Side Impact Protection and Harmonized Side Impact Dummies

In November 2009, an informal meeting was held in Washington, DC among interested experts to discuss international cooperation in the development of harmonized side impact dummies. In June 2010, WP.29 formed an IWG to develop a GTR for pole side impact (PSI) protection under the sponsorship and chairmanship of

Australia. At the same time, an IWG on Harmonized Side Impact Dummies was formed under the sponsorship and chairmanship of the United States. As the second group was tasked with supporting the PSI GTR by evaluating and further developing the WorldSID family of dummies, the two groups have generally met in conjunction. The side impact dummy IWG held its first meeting in November of 2009 and the PSI group held its first meeting in November 2010. The first tasks of the PSI IWG included confirming the safety need for the GTR and assessing potential candidate crash test procedures for the GTR. The planned GTR would contain pole side impact test procedures using side impact test dummies representing a 50th percentile adult male and a 5th percentile adult female.

Australia has since proposed that the GTR be drafted with a 50th percentile adult male dummy requirement only, and a placeholder for the 5th percentile adult female dummy in a first phase, since the WorldSID dummies will be finalized on different timelines, with the 50th percentile adult male dummy development expected to be completed well ahead of the 5th percentile adult female dummy. This would allow contracting parties to obtain benefits of the 50th percentile adult male without having to wait for the 5th percentile adult female to be finalized. WP.29 agreed to a change of the terms of reference of the IWG to allow this, with the provision that no contracting party would be required to initiate the process to adopt the GTR until both phases were complete, even if it were to vote in favor of the first phase of the GTR.

The IWG is finalizing the evaluation of the 50th percentile male version of WorldSID to allow its incorporation in the Pole Side Impact GTR. While the Pole Side Impact IWG has agreed on injury risk curves for the 50th percentile male dummy and

has proposed provisional injury criteria, however, NHTSA has not evaluated how the criteria selected compare to our existing regulation. NHTSA is in a unique situation, compared to other countries, as it has an existing pole side impact regulation which incorporates other side impact dummies. While we would not want to deter other countries from adopting a pole side impact regulation, we believe that the United States needs to evaluate both WorldSID dummies together before we can make a decision about amending our existing regulation. In addition, there are some additional injury criteria the IWG is considering to add to phase 2 of the GTR for the 50th male dummy.

NHTSA is concerned that a GTR, which included requirements for a WorldSID 50th percentile adult but not a smaller adult dummy, such as the SID-IIs, would not provide protection to smaller adults or children. This is because the agency has found that including the smaller 5th percentile dummy is not only important to protect smaller adults, but is also effective in ensuring that air bags and sensors designed for side impact protection work effectively for impacts occurring at any point across vehicle full door widths.

At the GRSP session in December 2012, the expert from Australia, on behalf of the Chairman of the IWG submitted a progress report and a draft UN GTR. The draft GTR incorporates an oblique pole test similar to that in the FMVSS No. 214, "Side impact protection;" however, it uses the 50th percentile male WorldSID dummy. The chairman requested comments from GRSP experts in time to allow the draft to be submitted as an official document for the May 2013 session of GRSP, particularly on Annex 2 of Part II of the draft UN GTR. The Annex 2 provides the seating procedure for the test dummy. The seating procedure is adopted from an ISO document which was undergoing balloting in December and which ISO agreed at that time could be

incorporated in the GTR. When NHTSA first began evaluating the WorldSID dummies itself, it had to modify the existing FMVSS No. 214 seating procedure to fit the dummy in vehicles, due to its differences from the existing dummy. However, NHTSA tried to keep the modifications as close as possible to our own existing procedure. NHTSA has not yet fully evaluated the differences between our existing seating procedure and the ISO seating procedure and we would particularly request comments on the ISO procedure from those with experience with it.

The third issue which has been controversial within the IWG is the scope of vehicle types. Some contracting parties have wanted to limit the scope because they did not see a safety need relative to some vehicle types in their country. However, the current draft covers all vehicles that would be covered by NHTSA's existing FMVSS No. 214.

It is expected that the draft GTR will be recommended to WP.29 at the May 2013 session, in which case, it could be voted on by WP.29 as early as the November 2013 session.

Concerning the 5th percentile female WorldSID dummy, it appears that issues will significantly increase development time for this dummy. Currently, the effort on the 5th percentile female is expected to be completed by December 2015. Because of this, once Phase 1 of the PSI GTR is complete, the PSI IWG expects to suspend its meetings until the 5th percentile female WorldSID dummy development is complete. At that time it would resume its meetings to complete work on the GTR to incorporate the second dummy.

# C. Exchange of Information Item

# 1. Enforcement Working Group

At the June 2011 session of WP.29, NHTSA proposed that WP.29 consider forming a new working group that would meet to facilitate the regular exchange of non-proprietary or otherwise non-privileged information on enforcement-related activities from around the world to help governments identify and manage incidences of automotive non-compliance or defects more quickly. The participants of WP.29 welcomed and accepted the proposal. To date, three meetings of the IWG have been held, each during the November 2011, June 2012, and November 2012 sessions of WP.29. The IWG is open to all the delegates to WP.29 including the Contracting Parties, Non-Governmental Organizations and industry associations and is expected to meet twice a year going forward (each June and November session of WP.29) subject to the agreement of WP.29.

#### D. Compendium of Candidate GTRs

Article 5 of the 1998 Global Agreement provides for the creation of a compendium of candidate technical regulations submitted by the Contracting Parties.

To date, NHTSA has submitted several FMVSSs for inclusion in this Compendium.

These FMVSSs have all been listed in the Compendium after an affirmative vote of the Executive Committee of the 1998 Global Agreement.

The FMVSS listed in the Compendium include:

- FMVSS No. 108: Lamps, Reflective Devices, and Associated Equipment
- FMVSS No. 135: Passenger Car Brake Systems
- FMVSS No. 139: New Pneumatic Radial Tires for Light Vehicles

- FMVSS No. 202a: Head Restraints
- FMVSS No. 205: Glazing Materials
- FMVSS No. 213: Child Restraint Systems
- EPA and DOT programs for Light-duty Vehicle Greenhouse Gas
- EPA and NHTSA Programs for Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles
- EPA and NHTSA Programs for Revisions and Additions to the Motor
   Vehicle Fuel Economy Label: New Fuel Economy and Environment Labels for a
   New Generation of Vehicles Emission Standards and Corporate Average Fuel
   Economy Standards

Additionally, the Compendium contains Japan's submission for its technical standard for fuel leakage entitled "Regulations for road vehicles in Japan regarding hydrogen and fuel-cell vehicles."

#### **IV. Request for Comments**

NHTSA invites public comments on the various activities outlined in this notice. The agency plans to issue individual Notices of Proposed Rulemaking based on each GTR as it is established by WP.29 and will consider additional detailed comments at that time. In the event that the public comments provide new information and data that will lead the agency to adopt Final Rules that significantly differ from the GTRs upon which they were initially proposed, NHTSA will consider seeking amendments to those GTRs in an effort to maintain harmonization.

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Christopher J. Bonanti Associate Administrator for Rulemaking

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